

# Custer Telephone Cooperative Inc.

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Ms. Marlene Dortch Secretary Federal Communications Commission

February 27, 2014

Subject: Letter of Intent - FCC Rural Broadband Experiments

Dear Ms. Dortch:

Custer Telephone Cooperative, Inc. (Custer) wishes to show its interest for the FCC Rural Broadband Experiments program.

Custer is the certificated local exchange carrier (and ETC) in Custer and Lemhi counties of central ldaho, serving the communities of Challis, Elk Bend, Clayton and May, and extensive rural areas that surround these communities. We are continuously and cost-effectively expanding the reach of our fiber optic infrastructure within our existing service territory. Additionally, Custer's wholly owned subsidiary Custer Telephone Broadband Services LLC, is actively deploying optical fiber and offering high speed broadband in the town of Salmon. Custer's plans are to increase our service footprint within Salmon and the surrounding communities, as we have and continue to receive numerous requests to provide broadband services in the area.

#### **Our Service Area**

Our area is mainly very rural and sparsely populated. The area includes agricultural, mining, light industry, and recreational interests, including the nearby federal wilderness areas. Custer's ongoing goals are to provide services our subscribers want and need, just as if they were in more urban areas. We have built and are increasing and improving our optical fiber networks in the region. We also use some DSL and even HFC technologies in some areas. In addition we provide cellular service, including '4G' services, to much of our wireline certificated areas and some of the surrounding areas, through agreements with Verizon and others. We are the telecom providers in the area. We intend to always be the best choice for our subscribers, and we want to expand to the 'needy' nearby potential subscribers, including critical community facilities, businesses, and residents.

## The Proposed Area

Custer wants to extend high speed broadband into areas near our existing network. These areas include unserved and underserved areas within the following FCC-eligible census tracts, all of which are in Lemhi County:

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16059970200

16059970300

These areas are currently economically disadvantaged, geographically isolated, and have little chance of attracting other providers.

The proposed areas include 1513 locations, per the census information.

The areas include small and medium-sized businesses that serve the area and provide products and services far outside this area. These businesses could provide more and better, higher-paying jobs once the advantage of high speed broadband is available.

There are also some very important mining operations in the region. Current threats to the mining industries are putting a lot of pressure on the CCFs, as well as the communities and residents overall. For example, Thompson Creek Mine is a major employer in the area, and although they have plans for many years of continued mining in the area, have recently begun some restructuring and laid off 150 employees. This one example represents a sizeable impact to our communities. We believe affordable broadband will help provide new opportunities for employment, and will help the community respond in a positive manner.

## **Critical Community Facilities**

Our existing networks serve many schools and local government offices. The proposed broadband network will serve the following critical community facilities:

- The University of Idaho remote campus at Hot Springs Ranch
- Carmen Creek Charter School
- Leadore schools
- Rural health clinics
- Community centers, granges, etc.

We currently provide a dedicated data service to the U of I campus via an unlicensed wireless Ethernet system. Due to the challenging geography and periodic interference in the area, this link is not as fast or as reliable as the school desires, or as we would like to provide. Our proposed optical fiber connections will vastly increase the capabilities.

This kind of service offering would also allow these schools to connect to their counterparts within Custer's existing service territory, as well as schools throughout the State via the Syringa network. This would be potentially more functional than connecting via the open Internet.

Other critical community facilities in the proposed area include local, state, and federal offices, enabling more efficient management of the national wilderness areas just North and West of the proposed areas.

## **Proposed Services**

Custer offers a broad selection of services, including voice POTS, high speed data, and traditional video services in some areas. We intend to offer voice POTS, high speed broadband, and advanced services via broadband in the new areas, in multiple service tiers. The broadband services ranges from 10 Mbs Internet connectivity, to 1Gig Internet and 'dedicated data connections' for services such as "Virtual LANs" with service guarantees.

## Technology

Within the existing service territory, Custer uses FTTP as we build out new and upgraded facilities, with a GPON design. We also offer 'direct optical Ethernet' FTTP, FTTC (Fiber to the Cabinet), and advanced DSL. We also operate a coaxial HFC (Hybrid Fiber Coax) network with DOCSIS data services, in some areas. Our cellular offerings are based on wireless 3G CDMA, and 4G LTE for data. We have a thorough understanding of the uses and limits of all these technologies, and plan to use FTTP in all new areas. Our intent is to utilize FCC funds to construct the primary distribution routes, and use our own internal funding for the final connections to the premises. Our existing fiber optic backbone is already in place near these project areas, making it a relatively straightforward process to extend service to the project areas as compared to any of our competition.

We intend to utilize "wireless local loop" and cellular data equipment to reach isolated subscribers beyond the economical reach of optical fiber facilities, as we are currently deploying in several areas. Obviously the services speeds of the wireless equipment is not equal to that of the optical fiber, but we do achieve speeds much greater than the 3 Mbs / 768 kbs noted as 'served' in the FCC's data.

Custer connects to "big bandwidth" through membership in the Syringa optical fiber high-bandwidth backbone network. This gives Custer a lot of options for services, and a lot of experience running a portion of a high bandwidth network, with numerous DWDM optical channels traversing fiber belonging to Custer. Syringa also provides Custer with redundant, protected bandwidth paths out of the region.

## **Local Support**

Custer continues to be inundated with requests by the citizens and community leaders in the targeted project areas to expand the network and provide high speed broadband. We have discussed sponsoring community outreach programs such as adult education Internet training classes. This is the kind of thing we do in our communities.

## **Provider and Partners**

Custer plans to be the service provider in these areas. We can bring in our existing partner, Syringa Networks, and others for advanced services, and can integrate with other providers as we do currently through our upstream connections.

## **Timeline**

Our proposed project timeline is the FCC's timeline. We have already completed basic designs in these areas, and reviewed the anticipated environmental requirements. We can start work as soon as funded and as soon as the weather allows, with our plan being to offer service in these areas in the fall of 2015.

#### Cost

Custer has been financing its network and service expansions with internal funds and loans from the USDA RUS (Rural Utilities Service). Custer has not received any grant funds. Custer plans to continue to finance many aspects of the proposed expansions but needs some assistance to bring service to some areas in a timely manner. As mentioned previously, our plan is to finance the service drops and connection facilities internally, but to build the new last mile distribution routes with these requested grant funds. We request \$2,939,000 in one-time capital investment by the FCC's rural broadband CAF funds. Custer estimates the total cost of their last mile and service links to be approximately \$1,500,000 to connect up to 1,500 total locations. Custer will also leverage their existing network, backbone, interconnections, equipment and electronics, and support materials.

Custer would prefer one-time funding from the FCC for the capital expense, rather than continuing funding. This fund request is less than seven years of the CAF Phase II annual amounts for these census tract areas of \$453,830.33. However, to continue maintenance and upgrades needed for quality advanced broadband service some CAF Phase II funding will be necessary.

We have the capacity, experience, and capabilities to provide high speed broadband in these areas. We appreciate the opportunity provided by this program, and are eager to get started.

Sincerely,

Dennis L. Thornock Chief Executive Officer

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